

Title (en)
ELECTRONIC DEVICE

Title (de)
ELEKTRONISCHE VORRICHTUNG

Title (fr)
DISPOSITIF ÉLECTRONIQUE

Publication
EP 4099504 A1 20221207 (EN)

Application
EP 21760008 A 20210125

Priority
• CN 202010132991 A 20200229
• CN 2021073626 W 20210125

Abstract (en)
This application provides an antenna design solution. An antenna structure including a slot antenna and a wire antenna is disposed, and the antenna structure is excited to generate four antenna modes: a common mode slot antenna, a differential mode slot antenna, a common mode wire antenna, and a differential mode wire antenna in a symmetric feed manner and an anti-symmetric feed manner. This implements a high-isolation and low-ECC feature of a MIMO antenna. In addition, the antenna structure can implement an antenna covering a large quantity of frequency bands, so that an electronic device having limited space can transmit or receive electromagnetic wave signals of the large quantity of frequency bands.

IPC 8 full level
H01Q 23/00 (2006.01); **H01Q 1/24** (2006.01); **H01Q 21/00** (2006.01)

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H01Q 1/243 (2013.01 - EP US); **H01Q 1/244** (2013.01 - CN); **H01Q 1/36** (2013.01 - CN); **H01Q 1/50** (2013.01 - CN);
H01Q 5/10 (2015.01 - CN US); **H01Q 5/307** (2015.01 - CN US); **H01Q 5/35** (2015.01 - EP US); **H01Q 5/40** (2015.01 - EP US);
H01Q 7/00 (2013.01 - EP); **H01Q 9/285** (2013.01 - EP); **H01Q 9/42** (2013.01 - EP); **H01Q 13/10** (2013.01 - EP); **H01Q 13/106** (2013.01 - US)

Cited by
EP4123828A4

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4099504 A1 20221207; **EP 4099504 A4 20230712**; CN 113328233 A 20210831; CN 113328233 B 20221108; US 2023146114 A1 20230511;
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EP 21760008 A 20210125; CN 202010132991 A 20200229; CN 2021073626 W 20210125; US 202117802900 A 20210125